Recognition of Sex Work as a Profession

Why in News?

Recently, in a significant order, **Supreme Court** has recognised sex work as a "profession" and observed that its practitioners are entitled to dignity and equal protection under law.

- The court invoked its special powers under **Article 142 of the Constitution.** Article 142 provides discretionary power to the Supreme Court as it states that the Supreme Court in the exercise of its jurisdiction may pass such decree or make such order as is necessary for doing complete justice in any cause or matter pending before it.
- In 2020, the **National Human Rights Commission (NHRC)** recognised sex workers as informal workers.

What are the Highlights of the Supreme Court Judgment?

- **Criminal Law:**
  - Sex workers are **entitled to equal protection of the law and criminal law must apply equally in all cases,** on the basis of 'age' and 'consent'.
    - When it is clear that the **sex worker is an adult and is participating with consent**, the **police must refrain from interfering or taking any criminal action.**
    - **Article 21** declares that **no person shall be deprived of his life or personal liberty** except according to procedure established by law. This right is available to both citizens and non-citizens.
  - **Sex workers should not be "arrested or penalised or harassed or victimised"** whenever there is a raid on any brothel, "since voluntary sex work is not illegal and only running the brothel is unlawful".
- **Right of Child of a Sex Worker:**
  - A child of a sex worker **should not be separated from the mother merely on the ground that she is in the sex trade.**
  - Basic protection of human decency and dignity extends to sex workers and their children.
  - Further, **if a minor is found living in a brothel or with sex workers,** it should not be presumed that the child was trafficked.
  - In case the **sex worker claims that he/she is her son/daughter,** tests can be done to determine if the claim is correct and if so, the minor should not be forcibly separated.
- **Medical Care**:
  - Sex workers who are victims of sexual assault **should be provided every facility including immediate medico-legal care.**
- **Role of Media:**
  - **Media should take "utmost care not to reveal the identities of sex workers**, during

arrest, raid and rescue operations, whether as victims or accused and not to publish or telecast any photos that would result in disclosure of such identities.

What are the Related Provisions/Supreme Court Views in India?

- **Immoral Traffic (Prevention) Act:**
  - The legislation governing sex work in India is the **Immoral Traffic (Prevention) Act.**
    - The Suppression of Immoral Traffic in Women and Children Act was enacted in 1956.
  - Subsequent amendments were made to the law and the name of the Act was changed to **Immoral Traffic (Prevention) Act.**
  - The **legislation penalises acts** such as keeping a brothel, soliciting in a public place, living off the earnings of sex work and living with or habitually being in the company of a sex worker.
- **Justice Verma Commission (2012-13):**
  - The Justice Verma Commission had also **acknowledged that there is a distinction between women who are trafficked** for commercial sexual exploitation and adult, consenting women who are in sex work of their own volition.
- *Budhadev Karmaskar Vs State of West Bengal (2011) Case:*
  - The Supreme Court, in Budhadev Karmaskar v. State of West Bengal (2011), opined that sex workers have a right to dignity.

What are the Challenges Faced by Sex Workers?

- **Discrimination and Stigmatisation:**
  - The **rights of sex workers are non-existent**, and those doing such work face discrimination due to their criminalised status.
  - These individuals are **looked down upon and have no place in society,** and most times are treated harshly by their landlords and even the law.
  - Their fight to be given the **same human, health, and labour rights as others,** continues as they are not deemed as falling under the same category as other workers.
- **Abuse and Exploitation:**
  - Most times, **sex workers are exposed to a slew of abuses** that range from physical to mental attacks.
  - They would **face harassment from clients, their own family members,** the community, and even from people who are supposed to uphold the law.

Way Forward

- It is time to recognise sex work as work and assign morality to their work.
  - Adult men, women and transgender persons in sex work have the right to earn through providing sexual services, live with dignity, and remain free from violence, exploitation, stigma and discrimination.
- It is time we **rethink sex work from a labour perspective,** where we recognise their work and guarantee them basic labour rights.
- **Parliament must also take a re-look at the existing legislation** and do away with the 'victim-rescue-rehabilitation' narrative.
  - During these times of crisis especially, this is all the more important.

Source: TH

Rights of LGBTIQ+ Persons

Why in News?

Recently, **International Labour Organisation (ILO)** released a document on "Inclusion of LGBTIQ+ persons in the world of work". It provides certain **recommendations to ensure equal opportunities and treatment** for LGBTIQ+ persons at work.

- LGBTIQ stands for Lesbian, Gay, Bisexual, Transgender, Inter-sex and Queer.
- The plus sign **represents people with diverse SOGIESC** who identify using other terms. In some contexts, LGB, LGBT or LGBTI are used to refer to particular populations.
    - SOGIESC stands for sexual orientation, gender identity, gender expression and sex characteristics.

What is the International Labour Organization?

- It is the only tripartite United Nation **(UN) agency. It brings together governments, employers and workers of 187 member States** (India is a member), to set labour standards, develop policies and devise programmes promoting decent work for all women and men.
    - Received the **Nobel Peace Prize** in 1969.
- Established in 1919 by the **Treaty of Versailles** as an affiliated agency of the **League of Nations.**
- Became the first affiliated specialized agency of the UN in 1946.
- **Headquarters:** Geneva, Switzerland

What are the Recommendations?

- **National Policy and Labour Law Review:**
    - National policy and labour law review will allow **governments to assess their country's work policy environment** for LGBTIQ+ persons.
    - This will **allow the identification of concrete steps** for improving the legal and policy environment, ending discrimination and exclusions, and complying with international instruments.
        - Around the world, LGBTIQ+ persons face harassment, violence and discrimination on the basis of sexual orientation, gender identity, gender expression and sex characteristics.
        - Discrimination has an economic cost not just to LGBTIQ+ persons and their families but also to enterprises and national economies.
- **Launch Social Protection Programmes:**
    - It recommended member countries, employers' organisations and representatives of workers to launch social protection programmes to remove barriers that LGBTIQ+ persons face in the society.
- **Facilitate Consultation:**
    - In addition to **social dialogue with employers' and workers' organizations**, consultation with LGBTIQ+ communities are crucial.
        - This will **allow the identification of barriers faced by LGBTIQ+ persons** when entering the labour market and accessing government schemes, including those on social protection.
- **Work with Small and Medium Industry Associations:**
    - To address gender and sexual identity discrimination and stigma, **the International Labor Organization encouraged governments to work with small and medium**

- **sector associations**, sectoral unions, and informal economy workers' associations.
- **End Sexual Discrimination at Workplaces:**
  - **Encouraging employers' organisations to end sexual discrimination** at workplaces, it makes business sense to work on LGBTIQ+ inclusion in the workplace.
    - Studies have shown that **diversity in the workplace, including LGBTIQ+ persons, is better for business.**
    - It **signals a creative environment** that creates the right conditions for economic growth.
    - **Employers' organisations can provide policy guidance to their members,** undertake advocacy and raise awareness on including LGBTIQ+ persons in workplaces, promote social dialogue and collective bargaining, and facilitate learning and sharing of good practices among members.
- **Organise and Exercise the Right to Freedom of Association:**
  - ILO has asked **unions to help LGBTIQ+ workers organise** and exercise their right to freedom of association.
    - Workers associations can also ensure that **issues affecting LGBTIQ+ workers are represented in collective bargaining agreements** with employers and in workplace policies and other tools.
    - **Many LGBTIQ+ workers,** particularly those in smaller workplaces, may feel isolated without visible LGBTIQ+ peers or allies.

What is the Status of LGBTIQ+ Community in India?

- **National Legal Services Authority Vs. Union of India (2014):** The SC observed that "recognition of transgenders as a third gender is not a social or medical issue, but a human rights issue".
- **Navtej Singh Johar vs. Union of India (2018):** The SC **decriminalised homosexuality** by striking off parts of Section 377 of the **Indian Penal Code (IPC)** which were held violative of **Fundamental Rights** of LGBTQ Community.
  - The SC held that **Article 14 of the Constitution guarantees equality before law** and this applies to all classes of citizens therby restoring 'inclusiveness' of LGBTQ Community.
  - It also upheld the pre-eminence of **Constitutional morality** in India by observing that equality before law cannot be denied by giving precedence to public or religious morality.
  - The SC stated that the **'Yogyakarta Principles on the Application of International Law in Relation to Issues of Sexual Orientation and Gender Identity'** should be applied as a part of Indian law.
    - **Yogyakarta Principles recognise freedom of sexual orientation** and gender identity as part of Human Rights.
    - They were outlined in 2006 in Yogyakarta, Indonesia by a distinguished group of International Human Right experts.
- **Tussle Over Same Sex Marraiges:** In **Shafin Jahan v. Asokan K.M. and others (2018)** case, the SC observed that choice of a partner is a person's fundamental right, and it can be a same-sex partner.
  - However, in February, 2021, the Central Government opposed same-sex marriage in Delhi High Court stating that a marriage in India can be recognised only if it is between a "biological man" and a "biological woman" capable of producing children.
- **Transgender Persons (Protection of Rights) Act, 2019:** The Parliament has passed the **Transgender Persons (Protection of Rights) Bill, 2019** which has been criticised for its poor understanding of gender and sexual identity.

Source: TH

Draft Notification for E-Waste Management

For Prelims: E-waste, Single-Use Plastic, EPR

For Mains: Draft Notification for E-Waste Management, Plastic Waste Management Amendment Rules, 2021

Why in News?

The Ministry of Environment, Forest and Climate Change has released the **draft notification for Electronic Waste Management** for public feedback.

- India has a formal set of rules for electronic waste management, first announced **these** rules in 2016 **and amended it in 2018**. The latest rules are expected to come into effect by August 2022.
- Earlier, the Ministry had notified the **Plastic Waste Management Amendment Rules, 2021**. These rules prohibit specific **single-use plastic** items which have "low utility and high littering potential" by 2022.

What is the Draft Notification for Electronic Waste Management?

- **Electronic Goods Covered:** A wide range of electronic goods, including laptops, landline and mobile phones, cameras, recorders, music systems, microwaves, refrigerators and medical equipment have been specified in the notification.
- **E-Waste Collection Target:** Consumer goods companies and makers of electronics goods have to ensure at least 60% of their electronic waste is collected and recycled by 2023 with targets to increase them to 70% and 80% in 2024 and 2025, respectively.
    - Companies will have to **register on an online portal** and specify their annual production and e-waste collection targets.
- **EPR Certificates:** The rules bring into effect **a system of trading in certificates, akin to carbon credits, that will allow companies to temporarily bridge shortfalls**.
    - The rules lay out a system of companies securing **Extended Producer Responsibility (EPR) certificates.**
    - These certificates **certify the quantity of e-waste collected and recycled in a particular year by a company and an organisation** may sell surplus quantities to another company to help it meet its obligations.
- **Focus on Circular Economy:** New Rules emphasizes on the EPR, recycling and trading.
    - This follows from the government's objective to promote a **Circular Economy.**
- **Penalty**: Companies that **don't meet their annual targets will have to pay a fine or an 'environmental compensation'** but the draft **doesn't specify the quantum of these fines.**
- **Implementing Authority:** The **CPCB (Central Pollution Control Board)** will oversee the overall implementation of these regulations.
- **Responsibility of the State Governments:** The State governments have been entrusted with the responsibility of earmarking industrial space for e-waste dismantling and recycling facilities, undertaking industrial skill development and establishing measures for protecting the health and safety of workers engaged in the dismantling and recycling facilities for e-waste.

What is E-Waste?

- **About:**
    - E-Waste is **short for Electronic-Waste** and the term is used to describe old, end-of-life or discarded electronic appliances. It includes their components, consumables, parts and spares.
    - Laws to manage e-waste have been **in place in India since 2011, mandating that only authorised dismantlers and recyclers collect e-waste.** E-waste (Management) Rules, 2016 was enacted in 2017.

- India's first **e-waste clinic** for segregating, processing and disposal of waste from household and commercial units has been set-up in Bhopal, Madhya Pradesh.
- Originally, the Basel Convention **(1992)** did not mention e-waste but later it addressed the issues of e-waste in 2006 (COP8).
  - The Nairobi Declaration was adopted at COP9 of the Basel Convention on the Control of the Trans-boundary Movement of Hazardous Waste. It aimed at creating innovative solutions for the environmentally sound management of electronic wastes.
- **Challenges Related to Management of E-Waste in India:**
  - **Less Involvement of People:**
    - A key factor in used electronic devices not being given for recycling was because consumers themselves did not do so.
      - However, in recent years, countries around the world have been attempting to pass effective **'right to repair' laws.**
  - **Involvement of Child Labor:**
    - In India, about **4.5 lakh child laborers in the age group of 10-14 are observed to be engaged in various E-waste activities** and that too without adequate protection and safeguards in various yards and recycling workshops.
  - **Ineffective Legislation:**
    - There is absence of any public information on most State Pollution Control Boards (SPCBs)/PCC websites.
  - **Health hazards:**
    - E-waste contains over 1,000 toxic materials, which contaminate soil and groundwater.
  - **Lack of incentive schemes:**
    - No clear guidelines are there for the unorganized sector to handle E-waste.
    - Also, no incentives are mentioned to lure people engaged to adopt a formal path for handling E-waste.
  - **E-waste Imports:**
    - Cross-border flow of waste equipment into India- 80% of E-waste in developed countries meant for recycling is sent to developing countries such as India, China, Ghana and Nigeria.
  - **Reluctance of Authorities' involved:**
    - Lack of coordination between various authorities responsible for E-waste management and disposal including the non-involvement of municipalities.
  - **Security Implications:**
    - End of life computers often contain sensitive personal information and bank account details which, if not deleted leave opportunity for fraud.

Way Forward

- There are various startups and companies in India that have now started to collect and recycle electronic waste. We need better implementation methodologies and inclusion policies that provide accommodation and validation for the informal sector to step up and help us meet our recycling targets in an environmentally sound manner.
- Also, successfully raising collection rates required every actor to be involved, including consumers.

UPSC Civil Services Examination, Previous Year Questions

Q. Due to improper/indiscriminate disposal of old and used computers or their parts, which of the following are released into the environment as e-waste? (2013)

1. Beryllium
2. Cadmium
3. Chromium
4. Heptachlor
5. Mercury
6. Lead
7. Plutonium

Select the correct answer using the codes given below:

(a) 1, 3, 4, 6 and 7 only
(b) 1, 2, 3, 5 and 6 only
(c) 2, 4, 5 and 7 only
(d) 1, 2, 3, 4, 5, 6 and 7

Ans: (b)

Exp:

- Toxic chemicals in a computer system are Lead, Cadmium, Mercury, Beryllium, Brominated Flame Retardants (BFRs), Polyvinyl Chloride and Phosphorus compounds. Their improper handling and burning releases hydrocarbons and pollutes water bodies.
- Metals contained in circuit boards are Cadmium, Antimony, Lead and Chromium. Mercury is present in switches and lamps of many photocopiers, scanners, and fax machines. Lead can also be found in monitors. **Hence, 2, 3, 5 and 6 are correct.**
- Copper Beryllium alloy is used to provide "spring memory" that ensures continuous, fatigue-free electrical connections, meaning higher processing speeds and better performance for personal computers, routers, and the internet as well as radars, avionics, and defence system. **Hence, 1 is correct.**
- Plutonium is a highly reactive synthetic element of the actinide family which occurs in Uranium ores and is used as a fuel in nuclear power plants because of its ability to undergo nuclear fission.
- About 15 isotopes of Plutonium are known to exist and all of these isotopes are radioactive. It is not used in computers or their parts. **Hence, 7 is not correct.**
- Heptachlor is an organochlorine (Cyclodiene) insecticide which was first isolated from technical chlordane in 1946 and was used primarily by farmers to kill insects in seed grains and on crops, as well as by exterminators and home owners to kill termites. **Hence, 4 is not correct.**
- **Therefore, option (b) is the correct answer.**

[Source: TH](#)

Digital India BHASHINI

For Prelims: Digital India BHASHINI, Artificial Intelligence, MSME, Gram Panchayats, Optical Fiber

For Mains: Digital India Vision of India, Technology Missions, Government Policies & Interventions, Artificial Intelligence, Digital Government

Why in News?

Recently, the Ministry of Electronics and IT conducted a brainstorming session with Researchers and Start-ups aimed to shape strategy for **Digital India BHASHINI [BHASHa INterface for India].**

- The government **intends to integrate start-ups' innovation,** development and consumption of technology.

What is Digital India BHASHINI?

- **About**:
  - Digital India BHASHINI is **India's** Artificial Intelligence (AI) **led language translation platform.**
  - A Bhashini Platform will make **Artificial Intelligence (AI) and** Natural Language Processing (NLP) resources available to **MSME (Medium, Small and Micro Enterprises)**, Startups and Individual Innovators in the public domain.
  - Bhashini Platform is a part of the **National Language Translation Mission.**
    - The mission aims to ensure that as more Indians connect to the internet, they are able to access global content in their own languages.
- **Significance:**
  - **Digital Inclusion:**
    - It will **empower Indian citizens by connecting them to the Digital Initiatives** of the country in their own language thereby leading to digital inclusion.
    - It will also **encourage participation of startups.**
  - **Digital Government:**
    - **Mission will create and nurture an ecosystem involving Central/State government agencies** and start-ups, working together to develop and deploy innovative products and services in Indian languages.
      - It is a giant step to realize the goal of **Digital Government.**
  - **Increase the Content in Indian Languages:**
    - It also **aims to increase the content in Indian languages on the Internet substantially** in the domains of public interest, particularly, governance-and-policy, science & technology, etc., thus will encourage citizens to use the Internet in their own language.

What are India's initiatives for the Digital India Vision?	
Digital India Programme	**Digital India** aims to provide the much needed thrust to the nine pillars of growth ar Universal Access to Mobile Connectivity, Public Internet Access Programme, e-Govern Technology, e-Kranti - Electronic Delivery of Services, Information for All, Electronics Harvest Programmes.
Digital Entrepreneurship	The **establishment of 3.7 lakh** Common Service Centres across India has encourag areas and improved access to digital services for the common man.
Digital Services	Digital services like e-Hospital, **BHIM-UPI**, online scholarships, **DigiLocker**, **Umang** etc. have improved ease of living for citizens.
Unique Digital Identity (Aadhaar)	With 129 Crore **Aadhaar** holders, **India is home to the largest population with a world.**
India Stack	IndiaStack is a **set of platforms and Application Programming Interface (APIs)** startups and developers to utilise a unique digital Infrastructure to solve India's probl and cashless service delivery.
National Digital Educational Architecture (NDEAR)	The government has laid a **major emphasis on strengthening the country's dig** announcing setting up of a National Digital Educational Architecture (NDEAR) within t where the digital architecture will not only support teaching and learning activities bu governance administrative activities of the Centre and the States / Union Territories.
National Digital Health Mission (NDHM)	It aims to develop the backbone necessary to support the integrated digital health inf
Digital India BHASHINI	It is India's Artificial Intelligence (AI) led language translation platform. It aims to incr on the Internet substantially.

UPSC Civil Services Examination, Previous Year Questions

Q. Which of the following is/are the aim/aims of "Digital India" Plan of the Government of India? (2018)

1. Formation of India's own Internet companies like China did.
2. Establish a policy framework to encourage overseas multinational corporations that collect Big

Data to build their large data centres within our national geographical boundaries.
3. Connect many of our villages to the Internet and bring Wi-Fi to many of our schools, public places and major tourist centres.

Select the correct answer using the code given below:

(a) 1 and 2 only
(b) 3 only
(c) 2 and 3 only
(d) 1, 2 and 3

Ans: (b)

Exp:

- Digital India was launched by the Union Government on 7th August, 2014. It is implemented by the different ministries and units of governments at all level with overall coordination being done by the Department of Electronics and Information Technology (DeitY).
- **Digital Infrastructure as a Core Utility to Every Citizen :** Availability of high speed internet as a core utility for delivery of services to citizens; Hence, 3 is correct.
- There is no provision of establishing own internet companies and policy framework to encourage overseas multinational corporations that collect Big Data to build large data centres within our national geographical boundaries. **Hence, 1 and 2 are not correct.**

Q. Consider the following statements: (2018)

1. Aadhaar card can be used as a proof of citizenship or domicile.
2. Once issued, Aadhaar number cannot be deactivated or omitted by the Issuing Authority.

Which of the statements given above is/are correct?

(a) 1 only
(b) 2 only
(c) Both 1 and 2
(d) Neither 1 nor 2

Ans: (d)

Exp:

- Unique Identification Authority of India (UIDAI) is a statutory authority established under the provisions of the Aadhaar (Targeted Delivery of Financial and Other Subsidies, Benefits and Services) Act, 2016 by the GoI, under the Ministry of Electronics and Information Technology (MeitY).
- UIDAI is responsible for issuance of a 12 digit Unique Identification number (UID), named as "Aadhaar", to all residents of India that is robust enough to eliminate duplicate and fake identities, and can be verified and authenticated in an easy, cost-effective way.
- The Aadhaar platform helps service providers authenticate identity of residents electronically, in a safe and quick manner, making service delivery more cost effective and efficient. According to the GoI and UIDAI, Aadhaar is not a proof of citizenship. **Hence, statement 1 is not correct.**
- However, UIDAI has also published a set of contingencies when the Aadhaar issued by it is liable for rejection. An Aadhaar with mixed or anomalous biometric information or multiple names in a single name (like Urf or Alias) can be deactivated. Aadhaar can also get deactivated upon non-usage of the same for three consecutive years. **Hence, statement 2 is not correct. Therefore, option (d) is the correct answer.**

Pradhan Mantri Jan Arogya Yojana

For Prelims: Socio-Economic Caste Census (SECC) 2011, National Food Security Act (NFSA) portal, Ayushman Bharat – Pradhan Mantri Jan Arogya Yojana (AB PM-JAY)

For Mains: Health, Human Resource, Benefits of Pradhan Mantri Jan Arogya Yojana

Why in News?

The New Delhi Municipal Council (NDMC) approved the implementation of the Centre's flagship **Ayushman Bharat-Pradhan Mantri Jan Arogya Yojana (AB-PMJAY)** for the residents in its area.

- Ayushman Bharat, a flagship scheme of Government of India, was launched as recommended by the National Health Policy 2017, to achieve the vision of Universal Health Coverage (UHC). It has two inter-related components - Health and Wellness Centres (HWCs) and Pradhan Mantri Jan Arogya Yojana (PM-JAY).

What is Ayushman Bharat-PMJAY?

- **About:**
    - PM-JAY is the **world's largest health insurance/ assurance scheme** fully financed by the government.
    - **Launched in February 2018,** it offers a sum insured of **Rs.5 lakh per family for secondary care** (which doesn't involve a super specialist) as well as tertiary care (which involves a super specialist).
    - Under PMJAY, cashless and paperless access to services are provided to the beneficiaries at the point of service, that is, hospital.
    - Health Benefit Packages **covers** surgery, medical and day care treatments, cost of medicines and diagnostics.
        - Packaged rates (Rates that include everything so that each product or service is not charged for separately).
        - These are flexible but the hospitals can't charge the beneficiary more once fixed.
- **Beneficiaries:**
    - It is an entitlement-based scheme that targets the beneficiaries as identified by latest **Socio-Economic Caste Census (SECC) data.**
        - Once identified by the database, the beneficiary is considered insured and can walk into any empaneled hospital.
- **Funding:**
    - The funding for the scheme is shared – 60:40 for all states and UTs with their own legislature, 90:10 in Northeast states and Jammu and Kashmir, Himachal and Uttarakhand and 100% Central funding for UTs without legislature.
- **Nodal Agency:**
    - The **National Health Authority (NHA)** has been constituted as an autonomous entity under the Society Registration Act, 1860 for effective implementation of PM-JAY in alliance with state governments.
    - The State Health Agency (SHA) is the apex body of the State Government responsible for the implementation of AB PM-JAY in the State.

What are the Challenges in Implementing PMJAY?

- **Cooperation of States:**
    - Since **health is a State subject** and States are expected to contribute 40% funding for the scheme, it is critical to streamline and harmonise the existing State health insurance schemes to PMJAY.
        - West Bengal and Odisha have not implemented PMJAY.
- **Burden of Costs:**
    - Costs are a contested area between the care-providers and the Centre, and many for-profit hospitals see the government's proposals as unviable.
- **Inadequate Health Capacities:**
    - The ill-equipped public sector health capacities calls for necessary partnerships and coalitions with private sector providers.
    - In such circumstances, the provision of services can be ensured only if the providers are held accountable for their services.
- **Unnecessary Treatment:**
    - The National Health Policy 2017 proposed "strategic purchasing" of services from secondary and tertiary hospitals for a fee.
    - The contracts with the healthcare providers who will receive the financial compensation package should clearly spell out the strict following of notified guidelines and standard treatment protocols in order to keep a check on potential for unnecessary treatment.

What are the Achievements of the Scheme?

- **Beneficial for Poor:**
    - In around the first 200 days of implementation, PM-JAY has benefitted more than 20.8 lakh poor and deprived people who received free treatment worth more than Rs. 5,000 crores.
- **During Covid-19:**
    - A key design feature of PM-JAY from the beginning of the scheme is portability, which helps to ensure that a PM-JAY-eligible migrant worker can access the scheme's services in any empanelled hospital across the country, irrespective of their state of residence.

Way Forward

- The vast ambition of the AB-PMJAY programme presents an opportunity to pursue the systemic reform that India requires to meet its **Universal Health Coverage (UHC)** aims.
    - This will require an injection of resources into a chronically underfunded health system, but this must be accompanied by a focus on the interrelated issues of governance, quality control, and stewardship if the scheme is to sustainably accelerate India towards UHC.
    - Public expenditure on health care in India remains at levels amongst the lowest in the world.
- Making good use of technology and innovation can further reduce the overall cost of healthcare. AI-powered mobile applications can provide high-quality, low-cost, patient-centric, smart wellness solutions. The scalable and inter-operable IT platform for the Ayushman Bharat is a positive step in this direction.

Source: ET

Swachh Survekshan 2023

For Prelims: 2nd Phase of SBM-U

Why in News?

The Ministry of Housing and Urban Affairs (MoHUA) has launched the **eighth edition of** Swachh Survekshan (SS) **– SS 2023** under **Swachh Bharat Mission Urban 2.0.**

- SS 2023 is curated towards achieving circularity in waste management. The survey would give priority to the principle of 3Rs – Reduce, Recycle and Reuse.

What is Swachh Survekshan 2023?

- Swachh Survekshan was **introduced by MoHUA in 2016 as a competitive framework to encourage cities to improve the status of urban sanitation** while encouraging large scale citizen participation.
    - Over the years, Swachh Survekshan has **emerged as the largest Urban sanitation survey in the world.**
- In SS 2023, **additional weightage has been given** to source segregation of waste, enhancement of waste processing capacity of cities to match the waste generation and reduction of waste going to the dumpsites.
    - Indicators have been introduced with **additional weightage on emphasizing the need for phased reduction of plastic**, plastic waste processing, **encourage waste to wonder parks** and zero waste events.
- **Ranking of Wards** within the cities is also being promoted through SS 2023.
- The cities would also be assessed on dedicated indicators on the issues of **'Open Urination' (Yellow Spots) and 'Open Spitting' (Red Spots),** being faced by the cities.
- MoHUA will be promoting **cleaning of back lanes** of the residential and commercial areas.

What is Swachh Bharat Mission-Urban 2.0?

- **About:**
    - SBM-U 2.0 was announced in **Budget 2021-22**, as the continuation of SBM-U first phase.
    - The government is trying to tap safe containment, transportation, disposal of fecal sludge, and septage from toilets.
        - SBM-U first phase was launched on 2nd October 2014 aiming at making urban India **Open Defecation Free (ODF)** and achieving 100% scientific management of municipal solid waste. It lasted till October 2019.
    - It will be **implemented over five years from 2021 to 2026** with an outlay of Rs.1.41 lakh crore.
    - The Mission is being implemented under the overarching principles of "waste to wealth", and **"Circular Economy".**
- **Aim:**
    - It focuses on source segregation of garbage, reduction in **single-use plastic** and air pollution, by effectively managing waste from construction and demolition activities and bioremediation **of all** legacy dump sites.
    - Under this mission, all wastewater will be treated properly before it is discharged into water bodies, and the government is trying to make maximum reuse a priority.
- **Mission outcomes:**
    - All statutory towns will become **ODF+ certified (focuses on toilets with water, maintenance and hygiene).**
    - All statutory towns with less than 1 lakh population will become ODF++ certified (focuses on toilets with sludge and septage management).
    - 50% of all statutory towns with less than 1 lakh population will become Water+ certified (aims to sustain toilets by treating and reuse of water).
    - All statutory towns will be at least **3-star Garbage Free rated** as per MoHUA's Star Rating Protocol for Garbage Free cities.

- Bioremediation of all legacy dumpsites.

India-Canada Science and Technology Cooperation

For Prelims: India-Canada Relations

For Mains: Bilateral Groupings and Agreements

Why in News?

Recently, two memorandums of understanding (MoUs) were renewed at the 7th India-Canada Joint Science and Technology Cooperation Committee (JSTCC) meeting.

- The MoUs were signed by the **Indian Ministry of Science and Technology** with the **Natural Sciences and Engineering Research Council of Canada (NSERC)** and **National Research Council Canada (NRC)**, respectively, under the **2005 Agreement for Scientific and Technological Cooperation.**
- Earlier, India and Canada held the **fifth Ministerial Dialogue on Trade & Investment (MDTI)**, where Ministers agreed to formally re-launch the negotiations for **India-Canada Comprehensive Economic Partnership Agreement (CEPA)** and consider an Interim Agreement or **Early Progress Trade Agreement (EPTA)** that could bring early commercial gains to both the countries.

What are the Highlights of the Meeting?

- The focus areas of the collaboration include national missions, **quantum computing**, **artificial intelligence (AI)**, and **cyber-physical systems**, among others.
  - A large number of Indian students studying in Canadian universities will benefit from the collboration.
- India and Canada benefit from strong bilateral relations and are **committed to deepening ties,**

with science, technology, and innovation being key pillars of the relationship.
- Under the terms of the agreement made in 2005, the JSTCC meets **every two years to review ongoing collaborations between Canadian and Indian researchers and set priorities for the next period** in fields like agriculture and food security, healthcare and healthtech, clean technologies and environmental research, marine and polar research, quantum tech and AI, and human capacity development and researcher mobility.
- Both countries **agreed to continue monitoring progress on key priorities in bilateral science, technology, and innovation projects (STIP) during the 2022-2024 period.**
- India plays an active role in the **global technology research and development ecosystem by facilitating academic and scientific relationships** with other countries.

How is India-Canada Cooperation in Various Spheres?

- **Political:**
  - India and Canada share **commonalities in Parliamentary structure and procedures.** After the general election in October 2019, Mr Raj Saini, MP from the House of Common has been appointed as the Chair of the Canada-India Parliamentary Association.
  - As of 2020, the House of Common in Canadian Parliament (total strength of 338) has 22 Members of Indian origin.
  - In India, **Canada is represented by the High Commission of Canada in New Delhi.** Canada also has Consulates General in Bengaluru, Chandigarh and Mumbai, as well as trade offices in Ahmedabad, Chennai, Hyderabad and Kolkata.
  - India is represented in Canada by a High Commission in Ottawa and by consulates in Toronto and Vancouver.
- **Economic:**
  - Bilateral trade between India and Canada stands **at USD 5 billion.**
  - More than 400 Canadian companies have a presence in India, and more than 1,000 companies are actively pursuing business in the Indian market.
  - Indian companies in Canada **are active in the field such as Information Technology, software, steel, natural resources and banking sectors.**
  - **India's exports to Canada** include pharma, iron and steel, chemicals, gem and jewelry, nuclear reactors and boilers.
  - Energy has been a primary area of our focus, considering that Canada is an 'energy superpower' with one of the world's largest resources of uranium, natural gas, oil, coal, minerals and advanced technologies in hydropower, mining, renewable energy and nuclear energy.
- **Science and Technology:**
  - Indo-Canadian Science and Technology cooperation has been **primarily focused on promoting Industrial R&D (Research and Development)** which has potential for application through development of **new IP (Intellectual property) processes**, prototypes or products.
  - Department of Biotechnology **under IC-IMPACTS program implements joint research projects in health care, agri-biotech and waste management.**
    - IC-IMPACTS (the India-Canada Centre for Innovative Multidisciplinary Partnerships to Accelerate Community Transformation and Sustainability) is the first, and only, Canada-India Research Centre of Excellence established through the Canadian Networks of Centres of Excellence (NCE) as a Centre dedicated to the development of research collaborations between Canada and India.
  - Department of Earth Science and Polar Canada have started **a programme for exchange of knowledge and scientific research on Cold Climate (Arctic) Studies.**
- **Space:**
  - India and Canada are pursuing successful **cooperative and commercial relations in the field of Space since 1990s** mainly on space science, earth observation, satellite launch services and ground support for space missions.
  - **ISRO and Canadian Space Agency (CSA) have signed MOUs** in the field of exploration and utilisation of outer space.
  - **ANTRIX**, the Commercial arm of **ISRO**, has. launched several nanosatellites from Canada.
  - ISRO in its 100th Satellite **PSLV launched in 2018**, also flew Canadian first LEO (Low earth Orbit) satellite, from Indian spaceport Sriharikota.

- **Security and Defence:**
  - India and Canada **collaborate closely in international fora particularly through the UN, Commonwealth and G-20.**
  - A Statement of Intent (SoI) on Cooperation between DRDO and **Canada's Defence Research and Development Council has been signed in 2015.**
  - The security cooperation was further enhanced with the **Framework for Cooperation between India and Canada on Countering Terrorism** and Violent Extremism signed by the National Security Advisor of India and the National Security and Intelligence Advisor of Canada in 2018.
  - There is **substantial engagement on counter terrorism issues** particularly through the framework of the Joint Working Group (JWG) on Counter Terrorism.

Source: PIB

PARAM PORUL Supercomputing Facility

Why in News?

PARAM PORUL, a state-of-the art **Supercomputer at NIT Tiruchirappalli** under **National Supercomputing Mission (NSM)** was inaugurated.

- PARAM PORUL supercomputing facility is established **under Phase 2 of the NSM.** Majority of the components have been manufactured and assembled within the country, along with an indigenous software stack developed by C-DAC, in line with the **Make in India initiative.**

What are the Features of PARAM PORUL?

- PARAM PORUL system is equipped with a mix of CPU (Central Processing Unit) nodes, GPU (Graphics Processing Unit) nodes, High Memory nodes, High throughput storage and high-performance InfiniBand interconnect to cater the computing needs of various scientific and engineering applications.
- This system is based on **Direct Contact Liquid Cooling technology** to obtain a high-power usage effectiveness and thereby reducing the operational cost.
- Multiple applications from various scientific domains such as Weather and Climate, Bioinformatics, Computational Chemistry, Molecular Dynamics, Material Sciences, Computational Fluid Dynamics etc. have been installed on the system for the benefit of researchers.

What is the National Supercomputing Mission?

- **In 2015**, the National Supercomputing Mission was launched to enhance the research capacities and capabilities in the country by connecting them to form a Supercomputing grid, with National Knowledge Network (NKN) as the backbone.
  - The NKN project is aimed at establishing a strong and robust Indian network which will be capable of providing secure and reliable connectivity.
  - A supercomputer is a computer that performs at or near the currently highest operational rate for computers.
- The Mission **plans to build and deploy 24 facilities with cumulative compute power of more than 64 Petaflops.**
  - Generally, PETAFLOP is a measure of a Supercomputer's processing speed and can be expressed as a thousand trillion floating point operations per second.
- It **supports the government's vision of '**Digital India**' and 'Make in India' initiatives.**
- The Mission is being **jointly steered by the Department of Science and Technology (DST) and the Ministry of Electronics and Information Technology (MeitY).**

- It is **implemented by the Centre for Development of Advanced Computing (C-DAC), Pune, and the IISc, Bengaluru.**
  - The mission was planned in **three phases:**
    - Phase I looking at assembling supercomputers,
    - Phase II looking at manufacturing certain components within the country.
    - Phase III where a supercomputer is designed by India.
  - **Recent developments under National Supercomputing Mission:**
    - Under Phase 1 & Phase 2, 15 systems with computer power of 22 Petaflops (PF) have been built at IIT's, C-DAC, NIT, JNCASR, and IISER.
    - NSM deployed **"PARAM Ganga"** at IIT Roorkee in March 2022 with a supercomputing capacity of 1.66 Petaflops as a part of phase 2.
    - **PARAM Siddhi-AI** is the fastest supercomputer in India built under NSM with a capacity of 5.26 PF.
      - Japan's Fugaku is the world's fastest supercomputer.

Source: PIB

Bongosagar Exercise

Why in News?

Recently, the third edition of **Exercise Bongosagar,** bilateral naval exercise between India and Bangladesh, commenced at Port Mongla, Bangladesh.

What are the Key Highlights of the Exercise?

- **About:**
  - It is an **annual exercise. Second edition** of the exercise, held **in Northern Bay of Bengal in 2020.**
  - The exercise is aimed at **developing a high degree of interoperability and joint operational skills** through the conduct of a wide spectrum of maritime exercises and

operations between the two navies.

- **Participants in the Third Edition:**
  - Participating in the exercise are **Indian Naval Ships Kora**, a guided missile corvette, and **Sumedha,** an offshore patrol vessel.
  - Bangladesh Navy is being represented by BNS Abu Ubaidah and Ali Haider, both Guided Missile Frigates.

What are the other Related Exercises between two Countries?

- **Bilateral:**
  - **SAMPRITI:** Military Exercise
- **Multinational:**
  - **Bangladesh's Military exercise 'Shantir Ogroshena',**
  - TABLE TOP (Air),
  - IN-BN CORPAT (Navy),
  - SAMVEDNA (Multinational Air Exercise with Bangladesh, Nepal, Sri Lanka and UAE).

Source: PIB